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# A One-Third Octave Real Time Audio Analyzer

Matthew Johnson

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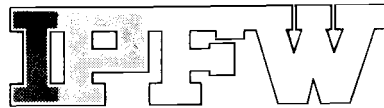
# **SENIOR DESIGN**

## **TECHNICAL REPORT**

for

A One-Third Octave Real Time Audio Analyzer  
title

in partial fulfillment of the requirements  
for the degree of  
**BACHELOR OF SCIENCE**



presented to the  
ELECTRICAL ENGINEERING TECHNOLOGY FACULTY  
INDIANA UNIVERSITY-PURDUE UNIVERSITY AT FORT WAYNE

December 7, 1981  
date

by

Matthew Johnson

GRADE: \_\_\_\_\_

APPROVED: \_\_\_\_\_

## ABSTRACT

This paper presents a low cost, one third octave, real time spectrum analyzer that utilizes voltage controlled amplifier technology. The design features, theory of operation and performance characteristics are discussed.

## TABLE OF CONTENTS

ABSTRACT.....	II
LIST OF ILLUSTRATIONS.....	V
INTRODUCTION.....	1
I. GENERAL DESCRIPTION.....	1
II. THEORY OF OPERATION.....	3
A. MICROPHONE	
B. INPUT STAGES	
1. Microphone Preamplifier	
2. Line Input	
C. VOLTAGE CONTROLLED AMPLIFIER	
1. Input Current	
2. Output Current	
3. Low Frequency Rolloff	
4. High Frequency Rolloff	
5. VCA Control Circuit	
D. WEIGHTING FILTER	
E. BANDPASS FILTERING AND RECTIFICATION	
F. VOLTAGE REFERENCE	
G. REFERENCE SWITCHING	
H. COMPARATORS AND DISPLAY	
I. PINK NOISE SOURCE	
J. POWER SUPPLY	
III. PERFORMANCE.....	20
A. INPUT, VCA AND WEIGHTING FILTER SECTIONS	
B. BANDPASS FILTERING AND RECTIFICATION	
C. PINK NOISE SOURCE	

IV. SUMMARY.....	21
APPENDIX 1.....	23
AKG C-450 Microphone System Specifications	
APPENDIX 2.....	28
Specifications of the dbx 2001 VCA	
APPENDIX 3.....	30
Component Values for the 1/3 Octave Bandpass filters	
APPENDIX 4.....	33
Real Time Analyzer Schematic Diagram	
REFERENCES.....	35

## LIST OF ILLUSTRATIONS

FIGURE 1.....	2
Simplified Block Diagram	
FIGURE 2.....	5
Artificial Center Tap for Powering of C-451E Condenser Microphone	
FIGURE 3.....	7
Microphone Preamplifier	
FIGURE 4.....	8
Control Voltage to Gain Relationship for the dbx 2001 VCA	
FIGURE 5.....	9
Voltage Controlled Amplifier Circuit	
FIGURE 6.....	11
VCA Control Voltage Circuit	
FIGURE 7.....	13
A-Weighted Frequency Response	
FIGURE 8.....	13
A-Weighting Filter Circuit	
FIGURE 9.....	15
Bandpass Filter Frequency Response	
FIGURE 10.....	16
Bandpass and Averaging Filters	
FIGURE 11.....	19
Pink Noise Generator and Amplifier	